

POLIGRAT-PRODUCT INFORMATION

CuproChem

Chemical Polishing and Deburring Process for Copper and Brass



Properties and Effect

CuproChem is a highly efficient chemical process for the deburring and smoothening of brass. Copper material can be deburred and brightened to a comparable quality as electropolishing. The degree of brightness achieved on brass is strongly influenced by the concentration of lead in the brass alloy. A low lead content (i.e. alloys MS 60/63) achieves better brightness.

Wide processing window:

- short polishing time: 1 – 3 min.
- process temperature: 30 – 35 °C
- consistent results and process parameters right from the start up to an upper metal loading of approx. 50 g metal/l

Economics

Due to the fast metal removal and efficient chemical consumption, the process is ideal for the chemical deburring and cleaning prior to chemical polishing processes (i.e. CuproChem) or coating processes (i.e. Ag-plating)

Application

CuproChem is an immersion process. The parts to be treated can be processed either on jigs, in baskets or as bulk goods in rotary barrels.

The process sequence consists of two process steps:

- In the 1st process step (CuproChem D 100) the parts are cleaned free from oxidation.
- In the 2nd process step (CuproChem G 100) the surface is smoothened and polished.

CuproChem and the rinse water from the process are acidic and contain the dissolved metal. They need to be treated and disposed of according to the statutory provisions and regulations.



Supply

Concentrate:

- | | DKK | GBK |
|-------------------|----------------|----------------|
| ▪ CuproChem | | |
| ▪ Single-use cans | 10 kg (10,1 l) | 10 kg (10,1 l) |
| ▪ Single-use cans | 30 kg (30,5 l) | 30 kg (30,5 l) |

Mixing for 100 l ready to use electrolyte:

- | | | |
|-------------------------|--|--------|
| ▪ CuproChem D 100 | | |
| DI water | | 87 l |
| sulphuric acid (96%) | | 9 l |
| hydrogen peroxide (35%) | | 2 l |
| CuproChem DKK | | 2 l |
| ▪ CuproChem G 100 | | |
| DI water | | 83,9l |
| sulphuric acid (96%) | | 0,6 l |
| hydrogen peroxide (35%) | | 13,5 l |
| CuproChem GBK | | 2,0 l |

Your Advantages

- high efficiency
- rapid gloss creation
- low processing temperature
- no generation of toxic processing gases